# Clean Water starts with you

The DNR tests waters throughout lowa to make sure they are meeting state water quality standards. Those standards are in place to protect drinking water, aquatic life and recreational uses, like swimming. When a stream or lake doesn't meet those standards, the stream or lake is placed on the state's impaired waters list. The DNR then creates a plan which outlines ways lowans can help improve the water quality in their community's lakes and streams.

### DNR needs your input

Every lowan needs the help of their fellow citizens and watershed groups to improve water quality in their community. If you or your group would like to meet with a DNR staff member to discuss water quality, please contact Chris Van Gorp at (515) 281-4791 or Chris.VanGorp@dnr.state.ia.us



For more information on water quality improvement plans, please visit www.iowadnr.com/water/ watershed/

# East Fork Des Moines River



Pollutant: Bacteria

Pollution Sources: Human and animal waste

The East Fork Des Moines River needs your help. As you'll read below, the DNR is putting together a plan which outlines the river's problems and possible solutions.

But it's up to you to make sure those solutions are put into effect. A healthier East Fork Des Moines River depends on you.

### What's wrong with the river?

Pollution from human and animal waste, also known as fecal matter, keeps the river from meeting its state-designated standards. Untreated waste from these sources can carry disease-causing microorganisms, called pathogens, into the water. These pathogens can make people sick.

Testing for E. coli bacteria levels can indicate if there may be fecal matter and disease-causing pathogens present in the water. Water quality testing has shown violations of bacteria standards in the East Fork Des Moines River since the early 1990s.

The impaired segment of the East Fork Des Moines River begins south of Algona at the Devine Access and runs downstream to where the East Fork meets the West Fork Des Moines River near Humboldt.

This 30-mile segment is located in Kossuth and Humboldt Counties, but receives water from portions of land in both lowa and Minnesota. The total watershed size (the area of land that drains into the river) is 833,307 acres.

However, it's necessary to improve water quality in the entire watershed to maintain clean water in the river along the impaired segment.

# What is causing the problem?

Bacteria in the river comes from both point sources, which are easily traced back to a specific "point," like a wastewater treatment or industrial plant, and nonpoint sources, which are not as easily traced. While there are point sources in the East Fork Des Moines River watershed, most pollution comes from nonpoint sources.

In the East Fork watershed, nonpoint sources include areas used to land-apply manure, feedlots and pastures, and improperly connected or failing septic systems. Rainwater and snowmelt can wash waste from livestock (confined and pastured), pets, and wildlife into the river.

To reduce the amount of fecal matter reaching the river, changes in waste and land management will be needed.

It will take time to make these changes and to see the effects.

## What can be done to improve the river?

The Iowa DNR is working on a water quality improvement plan (also known as a TMDL, or total maximum daily load) for the East Fork Des Moines River.

The ultimate goal is to improve water quality and remove the river from the state's impaired waters list. To do that, sources of human and animal waste need to be cleaned up in the watershed.

For that to happen, local community members, in cooperation with city, county and state governments, need to get involved. Participation by developers, local businesses and cities will be

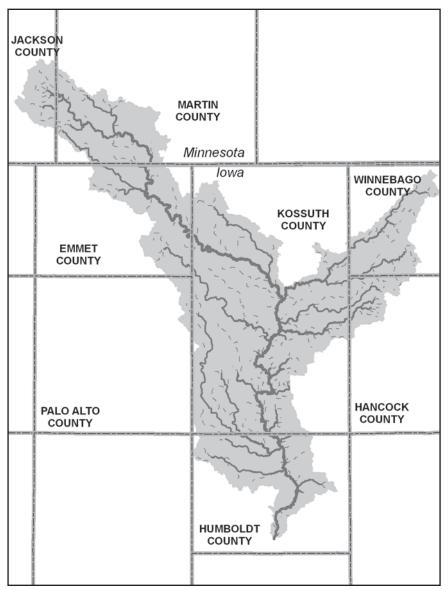
extremely important in implementing an improvement plan.

However, everyone's input and comments are important as we collectively work toward improving the situation in the river for future generations.

### What's Next

By helping the DNR create the water quality improvement plan for the East Fork, you're helping the DNR determine the needs for cleaning up the river.

When a final plan is ready and it's time to put the plan into action, the DNR can offer technical and funding assistance. But a cleaner, healthier East Fork Des Moines River depends on you.



Left: The East Fork Des Moines River watershed.

A watershed is an area of land that drains into a body of water. In this case, all land shaded in gray drains into the East Fork Des Moines River. It is also a part of the larger Des Moines River watershed, as the East Fork drains into the Des Moines River.